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DIGIMARC CORPORATION
9405 SW GEMINI DRIVE
BEAVERTON, OR 97008

EXAMINER	
AGWUMEZIE, CHARLES C	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/574,726
Filing Date: May 18, 2000
Appellant(s): RHOADS, GEOFFREY B.

Joel R. Meyer
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 15, 2008 appealing from the Office action mailed April 15, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6240185 B1	VAN WIE et al	5-2001
5,249,166	HAMILTON et al	9-1993
5,473,631	MOSES	12-1995

5,444,779 DANIELE 8-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 1, 8 and 11**, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed contains no support for "the imperceptible modification adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts" This is the first instance of this invention that is unrelated and unsupported by the original filing. Cancellation of new matter is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 1, 8 and 11,** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specially it would be unclear to one of ordinary skill in the art to understand what Applicant meant by "the imperceptible modification adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts" How is this process performed and what values are being changed in the performance of this process?

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 1-4, 6-9, 11-14, and 91-94,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Wie (herein after "Van Wie") U.S. Patent No. 6,240,185 B1.

7. As per **claims 1 and 11**, Van Wie discloses a method of distributing digital source material comprising:

passing the encoded source material (fig. 1A DVD 104) to a destination through at least one intervening steganographic decoder process (fig. 1A, media player with steganographic decoder; fig. 3, steganographic decoder), the encoded sources material

comprising plural-bit auxiliary data steganographically embedded in the digital sources material, the digital sources material including visual or audio signals that are perceptible (col. 11, lines 45-50, sound or music) when the output from the device, and the visual or audio signals including imperceptible modifications to perceptible parts of the visual or audio signals to embed the plural bit auxiliary data in the perceptible parts in a manner that is imperceptible to a user (icol. 8, lines 55-65, substantially invisible) the imperceptible modification adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts (see fig. 1, which discloses steganographic materials e.g. DVD, Tape; fig. 13, which discloses reading output of CD -ROM decoder; col. 8, line 50-col. 9, line 15, which discloses that the provider 60 encodes …signal 70 using steganographic technique that make the control information both substantially invisible and indelible …inextricably intertwined with the television images and/or sound; col. 24, lines 35-65, which discloses modified digital control information is provided within the redistribution content signal, …convert from analog to digital and vice versa);

within said intervening steganographic decoder process, detecting encoded source material transmitted thereby (fig. 13, extract steganographically encoded data; col. 5, lines 30-40, which discloses recover the steganographically-encoded control information from the information signal); and

crediting a payment in response to said detection of the encoded source material, in accordance with the plural-bit auxiliary data steganographically conveyed by the encoded source material (col. 5, lines 30-40, which discloses enforcing rights

…based on the recovered steganographically encoded control information; col. 6, lines 1-15, which discloses automatic electronic payment; col. 22, lines 25-40, which discloses report usage and payment information...).

8. What Van Wie does not explicitly disclose is the use of the claim phrases perceptible and/or imperceptible to the user. However Van Wie made it clear that the signal or the encoded and embedded signal is substantially inextricably intertwined and integrated with the information signal such that the encoded signal is invisible to the user. Accordingly it would have been obvious to one of ordinary skill in the art to recognize these claims phrases to be equivalent to invisible encoded signal as described by Van Wie.

9. As per **claim 2**, Van Wie further discloses the method which includes decoding plural-bit auxiliary data only from source material that has first been tested to indicate the likely presence of such auxiliary data therein (col. 4, line40-col. 5, line 5; col. 6, lines 45-55, which discloses analyses an information signal to determine…).

10. As per **claim 3**, Van Wie further discloses the method which includes testing source material by reference to an encoding attribute that is supplemental to said encoded plural-bit auxiliary data (col. 6, lines 45-55, which discloses analyses an information signal to determine…).

11. As per **claim 4,** Van Wie further discloses the method in which said attribute is the presence of a characteristic signature signal conveyed by said source material (see fig. 7 and 9).

12. As per **claim 6**, Van Wie further discloses the method in which said transmitting includes distributing through a network of interconnected computers (fig. 1 and 5).

13. As per **claim 7**, Van Wie further discloses the method of reporting said detection to a location remote from detection (figs. 2 and 7); and crediting royalties based on detection (col. 22, lines 25-40, which discloses report usage and payment information...).

14. As per **claim 8**, Van Wie discloses a method comprising:

presenting audio source material to a consumer, the material being encoded steganographically to convey plural-bit auxiliary data the audio source material including an audio signal that is audible when output from the device, the audio signal including imperceptible modifications to embed the plural-bit auxiliary data that are imperceptible to the consumer, the imperceptible modifications changing values of audible parts of the audio signal (see fig. 1, which discloses steganographic materials e.g. DVD, Tape; fig. 13, which discloses reading output of CD -ROM decoder; col. 8, line 50-col. 9, line 15, which discloses that the provider 60 encodes …signal 70 using steganographic technique that make the control information both substantially invisible and indelible

…inextricably intertwined with the television images and/or sound; col. 24, lines 35-65, which discloses modified digital control information is provided within the redistribution content signal, …convert from analog to digital and vice versa);

decoding the audio source material that is presented to the consumer to decode the auxiliary data therefrom (fig. 1, decoding image on a DVD; fig. 4, steganographic decoding of image); and

using the plural-bit auxiliary data to retrieve information about the source material from a remote location (col. 22, lines 25-40, which discloses communicate over the network ...with other related entities such as clearinghouses and repositories).

15. What Van Wie does not explicitly disclose is the use of the claim phrases perceptible and/or imperceptible to the user. However Van Wie made it clear that the signal or the encoded and embedded signal is substantially inextricably intertwined and integrated with the information signal such that the encoded signal is invisible to the user. Accordingly it would have been obvious to one of ordinary skill in the art to recognize these claims phrases to be equivalent to invisible encoded signal as described by Van Wie.

16. As per **claim 9**, Van Wie further discloses the method that includes:

storing data indicating the audio source material(s) presented to the consumer (see claim 2, storing said converted portion);

generating a report based on the stored data, indicating the audio source material(s) presented to the consumer (col. 22, lines 25-40, which discloses report usage and payment information...).

17. As per **claim 12**, Van Wie further discloses the method that includes making said payment through the registry (col. 22, lines 25-40, which discloses report usage and payment information...).

18. As per **claim 13**, Van Wie further discloses the method in which the object is a work of authorship, and the encoding adds a generally imperceptible level of noise to the object as it is perceived by a consumer thereof (col. 6, lines 35-45, "noise").

19. As per **claim 14**, Van Wie further discloses the method in which the registry comprises a database accessible through the internet (col. 22, lines 25-40, which discloses communicate over the network such as internet ...with other related entities such as clearinghouses and repositories).

20. As per **claim 91**, Van Wie further discloses the method wherein the payment is credited for entertainment content provided to the user in response to processing at least a portion of the plural-bit data (col. 22, lines 25-40, which discloses report usage and payment information...).

21. As per **claim 92**, Van Wie further discloses the method wherein the entertainment content is different from the encoded source material and is provided

from a location remote from the steganograhic decoder (col. 22, lines 25-40, which discloses communicate over the network such as internet ...with other related entities such as clearinghouses and repositories).

22. As per **claim 93**, Van Wie further discloses the method wherein at least a portion of the plural bits are used to obtain an address of web site related to the audio source material, and at least a portion of the plural bits are used to identify the audio source material (col. 5, lines 55-65)

23. As per **claim 94**, Van Wie further discloses the method wherein the transaction comprises providing content related to the object to a user, and the payment comprises payment associated with providing the content related to the object to the user (col. 22, lines 25-40, which discloses report usage and payment information...)

24. **Claim 5,** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Wie et al U.S. Patent No. 6,240,185 B1 in view of Mosses U.S. Patent No. 5,473,631.

25. As per **claim 5**, Daniele failed to explicitly disclose the method in which the signature signal is a repetitive noise burst signal.

Moses discloses the method in which the signature signal is a repetitive noise burst signal (col. 3, lines 40-64; col. 7, lines 32-56).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Van Wie and provide the method in which the signature signal is a repetitive noise burst signal in view of the teachings of Moses et al in order to show alternative method of detecting the data.

26. **Claim 10,** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Wie U.S. Patent No. 6,240,185 B1 in view of Hamilton et al U.S. Patent No. 5,249,166.

27. As per **claim 10**, Van wie failed to explicitly disclose the method which includes detecting the presented audio source material with a microphone, and decoding the auxiliary data from a microphone output signal.

Hamilton et al discloses the method which includes detecting the presented audio source material with a microphone, and decoding the auxiliary data from a microphone output signal (col. 6, lines 37-60).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Van Wie and provide the method method which includes detecting the presented audio source material with a microphone, and decoding the auxiliary data from a microphone output signal in view of the teachings of Hamilton et al in order to show alternative method of detecting the data.

28. **Claims 26-29**, are rejected under 35 U.S.C. 102(e) as being anticipated by Daniele U.S. Patent No. 5,444,779.

29. As per **claim 26**, Daniele discloses a method of altering music data to steganographically insert plural bits of watermark data therein, characterized by steganographically inserting at least a first group of said bits for benefit of an end-user of the music data by imperceptibly altering perceptible attributes of the music data, inserting a second group of bits different than the first for benefit of an artist whose music is encoded by said music data, inserting a third group of bits different than the first two for benefit of a distributor of the music data, and storing in a registry accessible to the end user an association between information about the music data and at least a portion of the plural-bits (col. 6, lines 39-67; col. 8, lines 20-40; col. 10, lines 1-20; …an indication of author and publisher or copyright holder may be ascertained once the glyph code is decoded…)

30. As per **claim 28**, Daniel further discloses the method in which the second group of bits includes bits representing a unique identifier for the music data, permitting machine identification of the data and royalty credit to the artist (col. 10, lines 1-25).

31. **Claims 27, and 29,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniele U.S. Patent No. 5,444,779 in view of Hamilton et al U.S. Patent No. 5,249,166.

32. As per **Claim 27,** Daniele shows the method including storing in the registry an association between the first group of bits but does not expressly show an internet address of a web site accessible by end-users of the music data, the registry providing the web site address in response to receiving at least the first group of bits.

However these differences are only found in the nonfunctional descriptive material and are not functionally involved in the steps recited. The detection of the encoding and payment of royalty would be performed the same regardless since the the internet is only a means of transferring the data and/or payment for the copyrighted material. Thus, this descriptive material will not distinguish the claimed invention from prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to transfer the information through the internet by representing the internet address with certain number of bits because such data does not functionally relate to the steps in the method or system claimed and because the subjective interpretation of the data does not patentably distinguish the claimed invention.

33. As per **claim 29**, Daniele failed to explicitly discloses the method in which the third group of bits represents usage restrictions to which audio appliances are responsive, thereby driving distribution of additional copies of the music data

Hamilton further discloses the method in which the third group of bits represents usage restrictions to which audio appliances are responsive, thereby driving distribution of additional copies of the music data (col. 6, lines 39-67).

Accordingly it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Daniele and provide the method in which the third group of bits represents usage restrictions to which audio appliances are responsive, thereby driving distribution of additional copies of the music data in view of the teachings of Hamilton et al in order to ensure only authorized user have access to the data.

(10) Response to Argument

112 rejection

With reference to **claims 1, 8, and 11**, Appellant argues that these claims comply with the written description requirement. That the specification clearly provides written support for "the imperceptible modification adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts" and cites the specification at page 8, lines 8-14, which describes how the steganographic encoding is perpetually adapted to the content signal.

In response, Examiner respectfully disagrees and submits that the cited portion of the specification at page 8, lines 8-14 has been thoroughly reviewed and Examiner found no such support for the claimed language. Accordingly the claimed limitation has no support in the specification.

Appellant further argues that **claims 1, 8, and 11** are definite to one of ordinary skill in the art. Specifically that one of ordinary skill would understand what is meant by the claim limitation: "the imperceptible modification adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts" when considered in light of the specification including the '260 patent specification.

In response, Examiner respectfully disagrees and submits that when the claimed limitation is considered in light of the specification a person of ordinary skill in the art would not understand the claimed language: "the imperceptible modification adaptively changing values of the perceptible parts of the visual or audio signals by a varying amount that depends on the values of the perceptible parts" because there is no support in the specification for the claimed limitation and because the '260 patent specification does not cure the deficiency of the current application.

Priority

Appellant further argues with respect to **claims 1, 8 and 11,** that the specification incorporated by reference the teachings of inventor Rhoads' work in his priority patents, including Patent No. 5,862,260 (the '260 patent) and 5,636,292 (the 292 patent) which provides further support for the claims in this application. That the application is entitled to priority at least to the '260 patent filed May 16, 1996.

In response, Examiner respectfully disagrees with Appellant's assertions and submits that Examiner is not aware of any priority claim to the '260 patent. Examiner further asserts that even if a priority is claimed for the '260 patent, that no such priority was accorded or will be accorded to the application for the following reason(s):

Accordingly to the MPEP, when a later-filed application is claiming the benefit of a prior-filed nonprovisional application under 35 U.S.C. 120, 121, or 365(c), the later-filed application must be copending with the prior application or with an intermediate nonprovisional application similarly entitled to the benefit of the filing date of the prior application. Copendency is defined in the clause which requires that the later-filed application must be filed before: (A) the patenting of the prior application; (B) the abandonment of the prior application; or (C) the termination of proceedings in the prior application. See MPEP 201.11(II)(B). It is Examiner's position that clauses (A), (B) or (C) above is inapplicable to the current application.

This application is claiming the benefit of prior-filed nonprovisional application No. 649,419 under 35 U.S.C. 120, 121, or 365(c). Copending between the current application and the prior application is required. Since the applications are not copending, the benefit claim to the prior-filed nonprovisional application is improper. Applicant is required to delete the reference to the prior-filed application from the first sentence(s) of the specification, or the application data sheet, depending on where the reference was originally submitted, unless applicant can establish copendency between the applications. See MPEP 201.11(II)(C). Therefore, no priority is accorded to the current application and for this reason Van Wie et al is a prior art as applied.

Appellant's sole basis for seeking a reversal of the Examiner's rejection to claims 1-4, 11-14, and 91-94 is the qualification of Van Wie as prior art. Hence, as Appellant has failed to establish copendency with either '260 patent or '292 patent, the rejection over Van Wie should be sustained.

103 Rejections

With respect to **claims 1-4, 11-14, and 91-94**, Appellant argues that these claims are not obvious in view of Van Wie because Van Wie has a priority filing date of August 1996, whereas the claims have priority support at least as early as May 1996, as a result of the priority to the '260 patent.

In response, Examiner respectfully disagrees and incorporates by reference the preceding paragraphs as if fully rewritten herein. Examiner further reiterates that Van Wie has priority filing date of August 1996 whereas the claimed invention has a priority filling date of May 2000 and that no priority is accorded the claims as a result of the '260 patent as Appellant appears to argue. Furthermore, Appellant has not disputed the rejections to claims 1-4, 11-14, and 91-94, but only whether the references qualify as prior art MPEP 201.11(II)(B) and (C).

With respect to **claim 5**, Appellant argues that claim 5 is patentable over the cited combination of Van Wie and Moses because Van Wie is not a prior art to claim 5.

In response, Examiner respectfully disagrees and incorporates by reference the preceding paragraphs as if fully rewritten herein. Examiner further reiterates that Van Wie has priority filing date of August 1996 whereas the claimed invention has a priority

filling date of May 2000 and that no priority is accorded the claims as a result of the '260 patent as Appellant appears to argue. Furthermore, Appellant has not disputed the rejections to claim 5, but only whether the references qualify as prior art MPEP 201.11(II)(B) and (C). Claim 5 is unpatentable over the cited combination of Van Wie and Moses.

With respect to **claim 10**, Appellant argues that claim 10 is patentable over the cited combination of Van Wie and Hamilton because Van Wie is not a prior art to claim 10.

In response, Examiner respectfully disagrees and incorporates by reference the preceding paragraphs as if fully rewritten herein. Examiner further reiterates that Van Wie has priority filing date of August 1996 whereas the claimed invention has a priority filling date of May 2000 and that no priority is accorded the claims as a result of the '260 patent as Appellant appears to argue. Furthermore, Appellant has not disputed the rejections to claim 10, but only whether the references qualify as prior art MPEP 201.11(II)(B) and (C). Claim 10 is unpatentable over the cited combination of Van Wie and Hamilton.

With respect to **claims 26-29**, Appellant argues that these claims are patentable over Daniele and Van Wie. That the rejection identifies Daniele in paragraph 29 and 31, but applies Van Wie in paragraph 30. That Van Wie is not a prior art.

In response, Examiner respectfully asserts that claims 26-29 are unpatentable over Daniele. Examiner erroneously typed Van Wie in paragraph 30 instead of Daniele. However the error is not fatal because the text of the rejection is based on Daniele and correction has been applied in this Examiner's answer. Examiner further reiterates that Van Wie is a prior art.

Appellant further argues with respect to **claim 26**, that Daniele teaches a glyph which is visible markings placed on documents. That while these documents might include prose, poetry or music … it is not technically possible to insert such a glyph mark into a music signal.

In response, Examiner respectfully disagrees and submits that Daniele made it clear that a glyph may be inserted into type of work which includes prose, poetry and music as shown in the rejection (see Daniele col. 6, lines 39-67, which discloses that glyph … can be used to identify the copying of specific lines … as in the reproduction of valuable poetry, plays or music …glyph code is not readily discernable (visible) to a person attempting to make unauthorized copy….; col. 7, lines 1-25, which discloses that "type of work prose, poetry or music…"; col. 8, lines 20-40; col. 10, lines 1-20, which discloses an indication of author and publisher or copyright holder may be ascertained once the glyph code is decoded…). If a glyph code is not readily discernable (visible) to a person attempting to make unauthorized copy as Daniele discloses then why is it only a visible marking placed on documents and not technically possible to be inserted into music as Appellant appears to argue.

With respect to **claims 27 and 29**, Appellant argues that these claims are patentable over the combination of Daniele and Hamilton because Daniele is not relevant to music signals and Hamilton does not disclose the elements of the claims missing from Daniele.

In response, examiner disagrees and submits that Daniele is relevant to music signals. Daniele clearly identified that the types of work may include prose, poetry or music. (see Daniele col. 6, lines 39-67, which discloses that glyph … can be used to identify the copying of specific lines … as in the reproduction of valuable poetry, plays or music …glyph code is not readily discernable (visible) to a person attempting to make unauthorized copy….; col. 7, lines 1-25, which discloses that "type of work prose, poetry or music…"; col. 8, lines 20-40; col. 10, lines 1-20, which discloses an indication of author and publisher or copyright holder may be ascertained once the glyph code is decoded…). Thus claims 27 and 29 are not patentable over Daniele and Hamilton as shown in the rejection.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Charlie C Agwumezie/
Primary Examiner, Art Unit 3685
February 20, 2009

Conferees:

/C.L.H./
Calvin L Hewitt II
Supervisory Patent Examiner, Art Unit 3685

/A. J. F./
Andrew J. Fischer
Supervisory Patent Examiner, Art Unit 3621